

# Practice 9-3

## Angles of Elevation and Depression

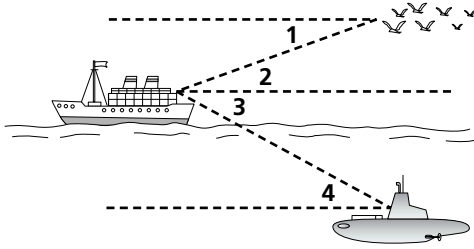
Describe each angle as it relates to the diagram.

1. a.  $\angle 1$

b.  $\angle 2$

c.  $\angle 3$

d.  $\angle 4$

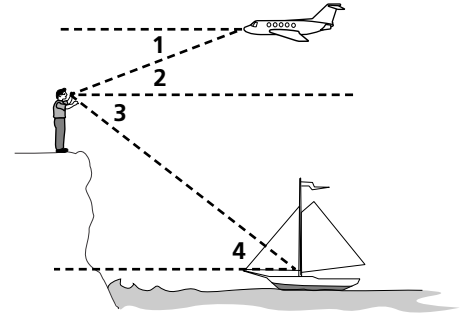


2. a.  $\angle 1$

b.  $\angle 2$

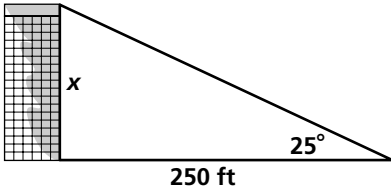
c.  $\angle 3$

d.  $\angle 4$

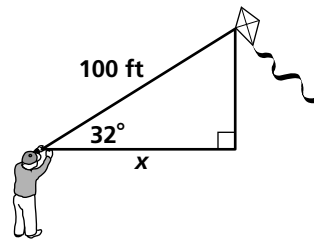


Find the value of  $x$ . Round the lengths to the nearest tenth.

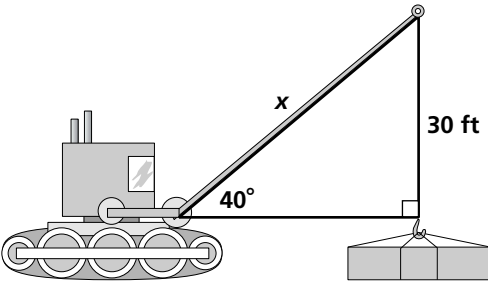
3.



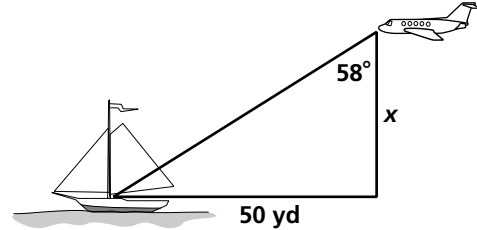
4.



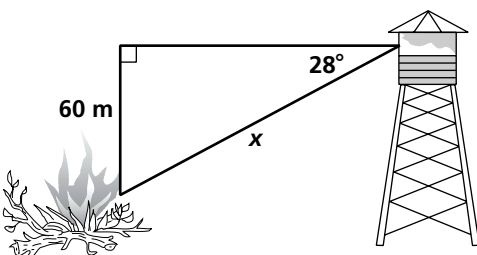
5.



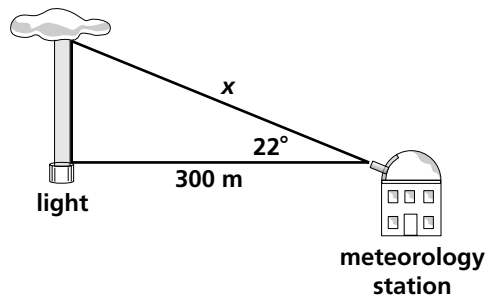
6.



7.



8.



9. A person standing 30 ft from a flagpole can see the top of the pole at a  $35^\circ$  angle of elevation.

a. Draw a diagram.

b. The person's eye level is 5 ft from the ground. Find the height of the flagpole to the nearest foot.